

## **IN THE CLAIMS**

1. (original) Cysteine containing peptides of the structure  
XXCCXXXXXXXXCXXXCXXXXXXXXQXXCXXXCXCCCCXXXCXXXXXX  
or of the structure  
XXCCXXXXXXXXCXXXCXXXXXXXXXXCXXXCXCCCCXXXCXXXXXX  
or of the structure  
XXCCXXXXXXXXCXXXCXXXXXXXXXXCXXXCXCCCCXXXCXXXXXX,  
wherein X, independently of one another, represents any naturally occurring amino acid.
2. (original) Cysteine containing peptides according to claim 1, wherein at position 15 the amino acid G and/or at position 19 the amino acid T and/or at position 23 the amino acid Q and/or at position 27 the amino acid Q and/or at position 28 the amino acid R and/or at position 31 the amino acid D and/or at position 33 the amino acid I and/or at position 34 the amino acid H and/or at position 35 the amino acid V and/or at position 36 the amino acid T and/or at position 37 the amino acid T and/or at position 38 the amino acid T and/or at position 43 the amino acid S and/or at position 44 the amino acid H and/or at position 46 the amino acid S is located.
3. (currently amended) Cysteine containing peptides according to ~~one of the previous claims~~ claim 1, namely  
KSCCRNTLGRNCYNGCRFTGGSQPTCGRLCDCIHVTTTTCPSSHPS (hellethionin-A),  
KSCCRNTLGRNCYNACRFTGGSQPTCGRLCDCIHVTTTTCPSSHPS (hellethionin-B1),  
KSCCRNTLARNCYNACRFTGGSQPTCGRLCDCIHVTTTTCPSSHPS (hellethionin-B2),  
KSCCRNTLGRNCYNACRLPGTPQPTCATLDCIHVTTPTCPSSHPR (hellethionin-B3),  
KSCCRNTLARNCYNACRFTGTSQPYCARLDCIHVTTPTCPSSHPR (hellethionin-B4),  
KSCCRNTLARNCYNACRFTGGSQPTCATLDCIHVTTPTCPSSHPR (hellethionin-

B5), KSCCRNTLARNCYNVCRFGGGSQAYCARFCDCIHVTTSTCPSSHPS  
(hellethionin-B6),  
KSCCRNTLGRNCYNACRLTGTSQATCATLCDCIHVTATTCRPPYPS (hellethionin-  
C),  
KSCCRNTLARNCYNACRFTGGSQPTCGILCDCIHVTTTTCPSSHPS (hellethionin-D),  
KSCCRNTLGRNCYAACRLTGLFSQEQCARLCDITVTTPTPCPRTHPS (hellethionin-  
E1),  
KSCCRNTLGRNCYAACRLTGTFSEQEQCARLCDITVTTPTPCPRTHPS (hellethionin-  
E2).

4. (currently amended) Nucleic acid sequence, which encodes a cysteine containing peptide compound according to ~~one of the previous claims~~ claim 1.
5. (original) RNA sequence and anti-sense RNA according to claim 4.
6. (original) DNA sequence and anti-sense DNA according to claim 4.
7. (currently amended) Ester derivatives, amide derivatives, halogen derivatives, methyl derivatives, salt derivatives, cyclic derivatives and derivatives with a modified backbone of the peptides according to ~~one of the claims 1 to 3~~ claim 1.
8. (original) DNA vector or DNA construct, which contains a DNA sequence according to claim 6.
9. (currently amended) Monoclonal antibodies targeted against an epitope of the cysteine containing peptides according to ~~one of the claims 1 to 3~~ claim 1.

Claims 10-32. (cancelled)

33. (new) A method for the treatment or prophylaxis of a disease comprising administering to a

patient in need thereof cysteine containing peptides according to claim 1, or functional derivatives of these peptides or mixtures thereof or pharmaceutically acceptable salts of these compounds.

34. (new) The method of claim 33, wherein the disease to be treated is caused by a pathogen, bacteria, fungi or viruses.
35. (new) The method of claim 33, wherein the disease to be treated is a disease of humans and animals, particularly of horses.
36. (new) The method of claim 33, wherein the disease to be treated is a disease caused by defective bioregulation of the immune system or are accompanied by a defective bioregulation of the immune system.
37. (new) The method of claim 33, wherein the disease to be treated is an autoimmune disease, cancer or AIDS.
38. (new) The method of claim 37, wherein the cancer is selected from the group comprising choroidal melanoma, acute leukaemia, acoustic neurinoma, ampullary carcinoma, anal carcinoma, astrocytoma, basal cell carcinoma, pancreatic cancer, bladder cancer, bronchial carcinoma, breast cancer, Burkitt's lymphoma, corpus cancer, CUP-syndrome, colorectal cancer, small intestine cancer, small intestinal tumors, ovarian cancer, endometrial carcinoma, ependymoma, epithelial cancer types, Ewing's tumors, gastrointestinal tumors, gallbladder cancer, uterine cancer, cervical cancer, glioblastomas, gynecologic tumors, throat, nose and ear tumors, hematologic neoplasias, hairy cell leukemia, urethral cancer, skin cancer, brain tumors (gliomas), brain metastases, testicle cancer, lymph node cancer (Hodgkin's/Non-Hodgkin's), hypophysis tumor, carcinoids, Kaposi's sarcoma, laryngeal cancer, germ cell tumor, bone cancer, colorectal carcinoma, head and neck tumors, colon carcinoma, craniopharyngiomas, oral cancer (cancer in the mouth area and on lips), liver cancer, liver metastases, leukaemia, eyelid tumor, lung cancer, lymphomas, stomach

cancer, malignant melanoma, breast carcinoma, rectal cancer, medulloblastomas, melanoma, meningiomas, Hodgkin's disease, mycosis fungoides, nasal cancer, neurinoma, kidney cancer, non-Hodgkin's lymphomas, oligodendroglioma, esophageal carcinoma, osteosarcomas, ovarian carcinoma, pancreatic carcinoma, penile cancer, plasmocytoma, prostate cancer, pharyngeal cancer, rectal carcinoma, retinoblastoma, vaginal cancer, thyroid carcinoma, Schneeberger disease, esophageal cancer, spinal glioma, T-cell lymphoma (mycosis fungoides), thymoma, tube carcinoma, eye tumors, urethral cancer, urologic tumors, urothelial carcinoma, vulva cancer, wart appearance, soft tissue tumors, Wilm's tumor, cervical carcinoma and tongue cancer.

39. (new) Pharmaceutical composition, comprising one or more cysteine containing peptides according to claim 1 or functional derivatives of these peptides or pharmaceutically acceptable salts or mixtures of these compounds.
40. (new) Pharmaceutical composition according to claim 39, further comprising at least one carbon suboxide derivative.
41. (new) Pharmaceutical composition according to claim 39, further comprising at least one cytostatically or cytotoxically active compound.
42. (new) Pharmaceutical composition according to claim 40, further comprising at least one cytostatically or cytotoxically active compound.
43. (new) Method for the extraction of the cysteine containing peptides according to claim 1 by extraction from the *Helleborus* plant species.
44. (new) Method according to claim 43, wherein a defatting of the plant material using non-polar solvents is carried out as first step of the method, particularly using tert.-butylmethylether.
45. (new) Method for the production of the cysteine containing peptides according to claim 1 by

gene technological methods.

46. (new) Method according to claim 45, wherein the thionine genes of a thionine producing corn are replaced by the thionine genes of species of the plant *Helleborus*.
47. (new) Method for the synthetic production of the cysteine containing peptides according to claim 1 and of functional derivatives of these peptides by peptide synthesis.